

## CLAIMS:

1. A data carrier (1) for the contactless communication with a communication station, by means of which communication station a communication signal ( $CS(f_0)$ ) can be generated, which can be transmitted to the data carrier (1) in a contactless manner,

which data carrier (1) includes an integrated circuit (3),

5 which integrated circuit (3) includes a voltage generation circuit (7) to which the communication signal ( $CS(f_0)$ ) can be applied and which is adapted to generate a d.c. supply voltage (V) with the aid of the communication signal ( $CS(f_0)$ ) and in which at least one electrical quantity (V; VL) which determines the amplitude value of the d.c. supply voltage (V) appears, and

10 which integrated circuit (3) in addition includes first switching means (22) to which at least one representation value (RVAL; CRVAL) representative of said electrical quantity (V; VL) can be applied and which switching means are adapted to generate a representation signal (REPS) representative of the amplitude value of the at least one representation value (RVAL; CRVAL), and

15 which integrated circuit (3) includes second switching means (28) with the aid of which the representation signal (REPS) can be transmitted to the communication station.

2. A data carrier (1) as claimed in claim 1,

in which the first switching means (22) include an analog-to-digital converter.

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3. A data carrier (1) as claimed in claim 1,

in which the integrated circuit (3) has command evaluation means (26) which are adapted to receive and evaluate an interrogation command (INTC) supplied by a communication station and which after reception and evaluation of such an interrogation command (INTC) cause the representation signal (REPS) to be transmitted from the data carrier (1) to this communication station.

25 4. A data carrier (1) as claimed in claim 1,

THERMOCOUPLES  
THERMISTORS  
PIR  
LDR  
OPTICAL SENSORS  
PRESSURE SENSORS  
TEMPERATURE SENSORS  
HUMIDITY SENSORS  
CO<sub>2</sub> SENSORS  
PH SENSORS  
CONDUCTIVITY SENSORS  
FLAME SENSORS  
FIRE SENSORS  
SMOKE SENSORS  
WATER LEVEL SENSORS  
PISTON POSITION SENSORS  
ROTATION SENSORS  
LINEAR POSITION SENSORS  
ANGULAR POSITION SENSORS  
FORCE SENSORS  
PRESSURE TRANSDUCERS  
TEMPERATURE TRANSDUCERS  
HUMIDITY TRANSDUCERS  
CO<sub>2</sub> TRANSDUCERS  
PH TRANSDUCERS  
CONDUCTIVITY TRANSDUCERS  
FLAME TRANSDUCERS  
FIRE TRANSDUCERS  
SMOKE TRANSDUCERS  
WATER LEVEL TRANSDUCERS  
PISTON POSITION TRANSDUCERS  
ROTATION TRANSDUCERS  
LINEAR POSITION TRANSDUCERS  
ANGULAR POSITION TRANSDUCERS  
FORCE TRANSDUCERS

in which the voltage generation circuit (7) includes a voltage limiting stage (30), from which the d.c. supply voltage (V) can be taken, and

in which means (39) have been provided with the aid of which a voltage (VL) appearing in the voltage limiting stage (30) and proportional to a current (I<sub>OUT</sub>) in the  
5 voltage limiting stage (30) can be applied to the first switching means (22) as a representation value (RVAL).

5. An integrated circuit (3) for data carrier (1) for the contactless communication with a communication station, by means of which communication station a communication  
10 signal (CS(f<sub>0</sub>)) can be generated, which can be transmitted to the data carrier (1) in a contactless manner,

which integrated circuit (3) includes a voltage generation circuit (7) to which the communication signal (CS(f<sub>0</sub>)) can be applied and which is adapted to generate a d.c. supply voltage (V) with the aid of the communication signal (CS(f<sub>0</sub>)) and in which at least one electrical quantity (V; VL) which determines the amplitude value of the d.c. supply voltage (V) appears, and

which integrated circuit (3) in addition includes first switching means (22) to which at least one representation value (RVAL; CRVAL) representative of said electrical quantity (V; VL) can be applied and which switching means are adapted to generate a representation signal (REPS) representative of the amplitude value of the at least one representation value (RVAL; CRVAL), and

which integrated circuit (3) includes second switching means (28) with the aid of which the representation signal (REPS) can be transmitted to the communication station.

25 6. An integrated circuit (3) as claimed in claim 5,  
in which the first switching means (22) include an analog-to-digital converter.

7. An integrated circuit (3) as claimed in claim 5,  
in which the integrated circuit (3) has command evaluation means (26) which  
30 are adapted to receive and evaluate an interrogation command (INTC) supplied by a communication station and which after reception and evaluation of such an interrogation command (INTC) cause the representation signal (REPS) to be transmitted from the data carrier (1) to this communication station.

8. An integrated circuit (3) as claimed in claim 5,  
in which the voltage generation circuit (7) includes a voltage limiting stage  
(30), from which the d.c. supply voltage (V) can be taken, and  
in which means (39) have been provided with the aid of which a voltage (VL)  
5 appearing in the voltage limiting stage (30) and proportional to a current (IOUT) in the  
voltage limiting stage (30) can be applied to the first switching means (22) as a representation  
value (RVAL).

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